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High isolation SAW antenna duplexer modules

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Abstract:
Optimized phase shifter conditions for SAW antenna duplexer modules at not
ohm cases have been analytically provided to achieve desired isolation
performances. In order to confirm the prediction, obtained optimum conditior
applied to two cases. In the EGSM/DCS dual band SAW antenna duplexer mo
case, impedances of low noise amplifier connecting the Rx ports are not 50 ol
when the amplifier are off state at transmitter period. We propose a optimize
phase shifter circuit for EGSM and DCS Rx output ports using the equation. Ir
Japanese cdmaOne duplexer case, we also propose an optimized phase shifte
circuit for the transmitter circuit between Rx band trap and transmitter top filt
block. The predictions are verified by the experiments

Index Terms:
antenna accessories   multifrequency antennas   phase shifters   surface acoustic wave
devices   50 ohm   EGSM/DCS dual band operation   Japanese cdmaOne   SAW antenn
duplexer module   isolation characteristics   low noise amplifier   phase shifter   transmitte
circuit

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L15	L14 and (duplex$ or branching or (transmi$ and (receiv$ or recept$)))	54498	L14
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	DB=JPAB; PLUR=YES; OP=ADJ	0	L13
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L4	l2 and reflection coefficient		
L3	(((((surface acoustic wave or surface wave or elastic surface wave or acoustic wave or saw or surface elastic wave or elastic wave))and (transmit$ or transmission) and (receiv$ or reception)) and (phase shift$ with impedance))	98	L3
L2	((((surface acoustic wave or surface wave or elastic surface wave or acoustic wave or saw or surface elastic wave or elastic wave)) and (transmit$ or transmission) and (receiv$ or reception))	19231	L2
L1	((surface acoustic wave or surface wave or elastic surface wave or acoustic wave or saw or surface elastic wave or elastic wave))	61786	L1

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